

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL LOCATED AT THE INTERSECTION OF US 301 AND MD 257. US 301 IS ASSUMED TO RUN IN THE NORTH/SOUTH DIRECTION IN CHARLES COUNTY.

THIS MODIFICATION INCLUDES THE FOLLOWING:
INSTALLATION OF TRAFFIC SIGNAL POLE,VIDEO DETECTION CAMERAS,INTERSECTION LIGHTING
BASE MOUNTED CABINET AND CONTROLLER,SIGNS,VEHICLE SIGNAL HEADS AND
NON-INVASIVE MICRO-LOOP PROBES AT THE INTERSECTION OF US 301 AND MD 257.

INTERSECTION OPERATION

THIS INTERSECTION CURRENTLY OPERATES IN A FLASHING MODE.
THERE WILL BE EXCLUSIVE LEFT TURN FOR SOUTHBOUND US 301 AND THE SOUTHBOUND THROUGH
MOVEMENT OF US 301 WILL HAVE AN EXCLUSIVE DIRECTION. THE THROUGH MOVEMENTS ALONG NORTHBOUND US 301
WILL OPERATE ALONE. THE MD 257 MOVEMENT WILL OPERATE ALONE.

SPECIAL NOTE

UPON COMPLETION OF THIS PROJECT,THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF THE S.H.A. AT 410-787-7635
TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER WITH THE NEAREST STREET
ADDRESS,ZIP CODE AND PHONE NUMBER.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE STATE OF MARYLAND.

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
9001	1	EA	[UPDATED] (CONT/CAB/ADD) DETECTOR RACK POWER SUPPLY
9016	1	EA	[UPDATED] 4 CHANNEL DETECTOR AMPLIFIER
9042	1	EA	[UPDATED] CONTROLLER ASC II WITH TELEMETRY
9044	1	EA	[UPDATED] CONTROLLER CABINET, SIZE 6
9086	1	EA	[UPDATED] VIDEO DETECTION INTERFACE EQUIPMENT: 1-4 CAMERAS
9570	54	SF	[UPDATED] SHEET ALUMINUM GROUND MOUNTED SIGN
9571	135	SF	[UPDATED] SHEET ALUMINUM MAST ARM / POLE MOUNTED SIGN
	1	EA	R3-5(L) 30"x 36" - MAST ARM MOUNT
	1	EA	R10 -12(4) 36"x 42" - MAST ARM MOUNT
	4	EA	D-3(1) VAR. x 16" (DUAL FACED) - MAST ARM MOUNT
	2	EA	W3-3 36"x 36" - GROUND MOUNT
	1	EA	R1-2 36"x 36" - GROUND MOUNT
	2	EA	OM1-(1) 18"x 18" - GROUND MOUNT
	3	EA	R6-1(R) 36"x 12" - GROUND MOUNT
	2	EA	R5-1 30"x 30" - GROUND MOUNT
	1	EA	SHIELD ASSEMBLY 48"x 78" - GROUND MOUNT
	3	EA	SHIELD ASSEMBLY 30"x 51" - POLE MOUNT
	2	EA	R1-2 36"x 36" - POLE MOUNT

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
1001	2	EA	MAINTENANCE OF TRAFFIC
2002	4	CY	TEST PIT EXCAVATION
5001	135	LF	5 INCH HEAT APPLIED WHITE OR YELLOW PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
5002	35	LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH
5005	80	LF	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
6002	80	SF	4 INCH CONCRETE SIDEWALK
8001	24	EA	12 INCH LED SIGNAL HEAD SECTION
8007	2	EA	ANY SIZE LIGHTING ARM ON SIGNAL POLE WITH 250 WATT HPS LAMP AND LUMINAIRE
8009	1	EA	BREAKAWAY PEDESTAL POLE ANY SIZE
8018	1	EA	MAST ARM POLE AND 70 FOOT MAST ARM ANY T DIMENSION
8021	2	EA	NONINVASIVE DETECTOR ANY LENGTH LEAD IN CABLE UP TO 1000 FT
8022	1	EA	REMOVE AND DISPOSE MATERIAL AND EQUIPMENT PER ASSIGNMENT
8023	1	EA	TWIN MAST ARM POLE AND 50 FT / 60 FT MAST ARM ANY DIMENSION
8026	3	EA	VIDEO DETECTION CAMERA AND CABLE UP TO 500 FOOT
8035	555	LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES TRENCHED
8036	330	LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES BORED
8037	88	LF	WOOD SIGN SUPPORTS UP TO 4 INCH X 6 INCH
8039	189	SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN INCLUDING ALL HARDWARE
8041	300	LF	NO 6 AWG STRANDED BARE COPER GROUND WIRE
8043	1	EA	METERED SERVICE PEDESTAL EMBEDDED
8045	105	LF	ELECTRICAL CABLE 1 CONDUCTOR NO 4 AWG THHN / THWN
8047	7	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8056	75	LF	ELECTRICAL CABLE - 5 CONDUCTOR NO 14 AWG
8057	160	LF	ELECTRICAL CABLE - 7 CONDUCTOR NO 14 AWG
8058	200	LF	ELECTRICAL CABLE - 2 CONDUCTOR NO 12 AWG TC
8065	1	EA	INSTALL CONTROLLER AND CABINET - BASE MOUNT

C. ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
		NONE	

PROJECT CONTACTS

THE CONTACT PERSONS ARE AS FOLLOWS:

MRS. KIMBERLY TRAN
DISTRICT ENGINEER-TRAFFIC
PHONE: 410-841-1003

MR. JOHN S. MAYS
DISTRICT UTILITY ENGINEER
PHONE: 410-841-1005

MR. ANDRE FUTREL
ASSISTANT DISTRICT ENGINEER-MAINTENANCE
PHONE: 410-841-1002

MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATION DIVISION
PHONE: 410-787-7630

MR. ED RODENHIZER
CHIEF, SIGNAL OPERATION SECTION
PHONE: 410-787-7652

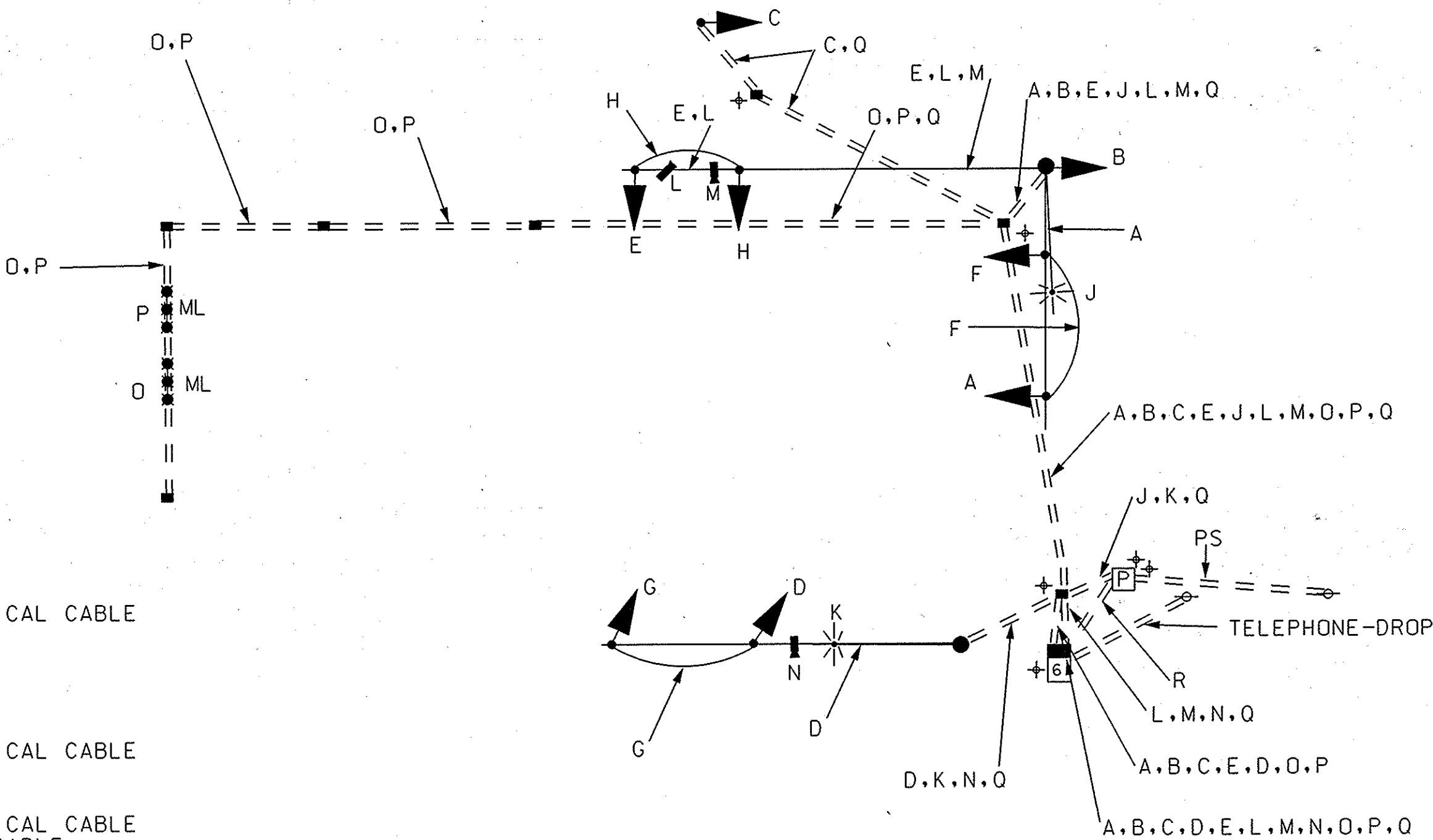
MR. ROBERT SNYDER
ASST. CHIEF,
TRAFFIC OPERATION DIVISION
PHONE: 410-787-7631

PHASE CHART

1	2	3	4	5	6	7	8
(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)
(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)
(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)

PHASE 5	R	R	+G-	+G-	G	G	R	R	
5 CHANGE	R	R	+Y-	+Y-	Y	Y	R	R	
PHASE 6	G	G	FL/R	FL/R	FL/R	FL/R	R	R	
6 CHANGE	Y	Y	+R-	+R-	R	R	R	R	
PHASE 4	R	R	+R-	+R-	R	R	G	G	
4 CHANGE	R	R	+R-	+R-	R	R	Y	Y	
FLASHING OPERATION	FLY	FLY	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	

WIRING DIAGRAM



KEY

- A B C D E } 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- F G H } 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- J K } 2 CONDUCTOR ELECTRICAL CABLE (NO. 12 AWG) TRAY CABLE
- L M N } VIDEO DETECTION CABLE
- O P } MICRO-LOOP PROBE 1000 FT LEAD-IN CABLE
- Q — 1 CONDUCTOR (NO. 6 AWG) STRANDED COPPER GROUND WIRE
- R — 3 WIRE 1 CONDUCTOR (NO. 4 AWG)
- ML — MICRO-LOOP PROBE (3 SET)
- PS — POWER SERVICE UNDERGROUND
- + — GROUND ROD

TOD No: AT915-16
SHA No.: CH337A52/B52
US 301 @ MD 257

BAI

BRUDIS & ASSOCIATES, INC.
CONSULTING ENGINEERS

9220 RUMSEY ROAD SUITE 110
COLUMBIA, MARYLAND 21045

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
US 301(CRAIN HIGHWAY) AND
MD 257(ROCK POINT ROAD)
NEWBURG, MARYLAND

GENERAL INFORMATION PLAN

SCALE	NONE	DATE	11/06	CONTRACT NO.	AT9155185
DESIGNED BY	M.A. MEARS	COUNTY	CHARLES		
DRAWN BY	M.A. MEARS	LOGMILE	08025709.75		
CHECKED BY	RJM	T.I.M.S. NO.	H576		
F.A.P. NO.		TOD NO.			
DRAWING NO.	GI	OF		SHEET NO.	2 OF 2

PLOTTED: \$DATE\$TIME\$
FILE: \$FILE\$